

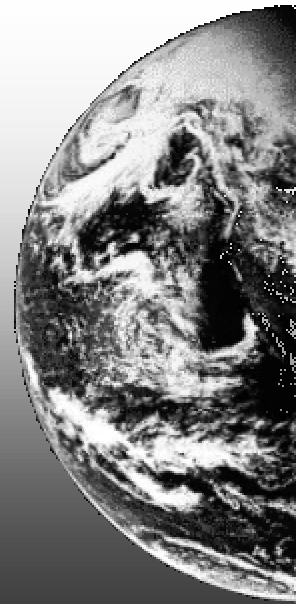


John W. Douglass
President & CEO

NDIA
National Summit On U.S. Defense Policy

Long Beach, California

March 27, 2001



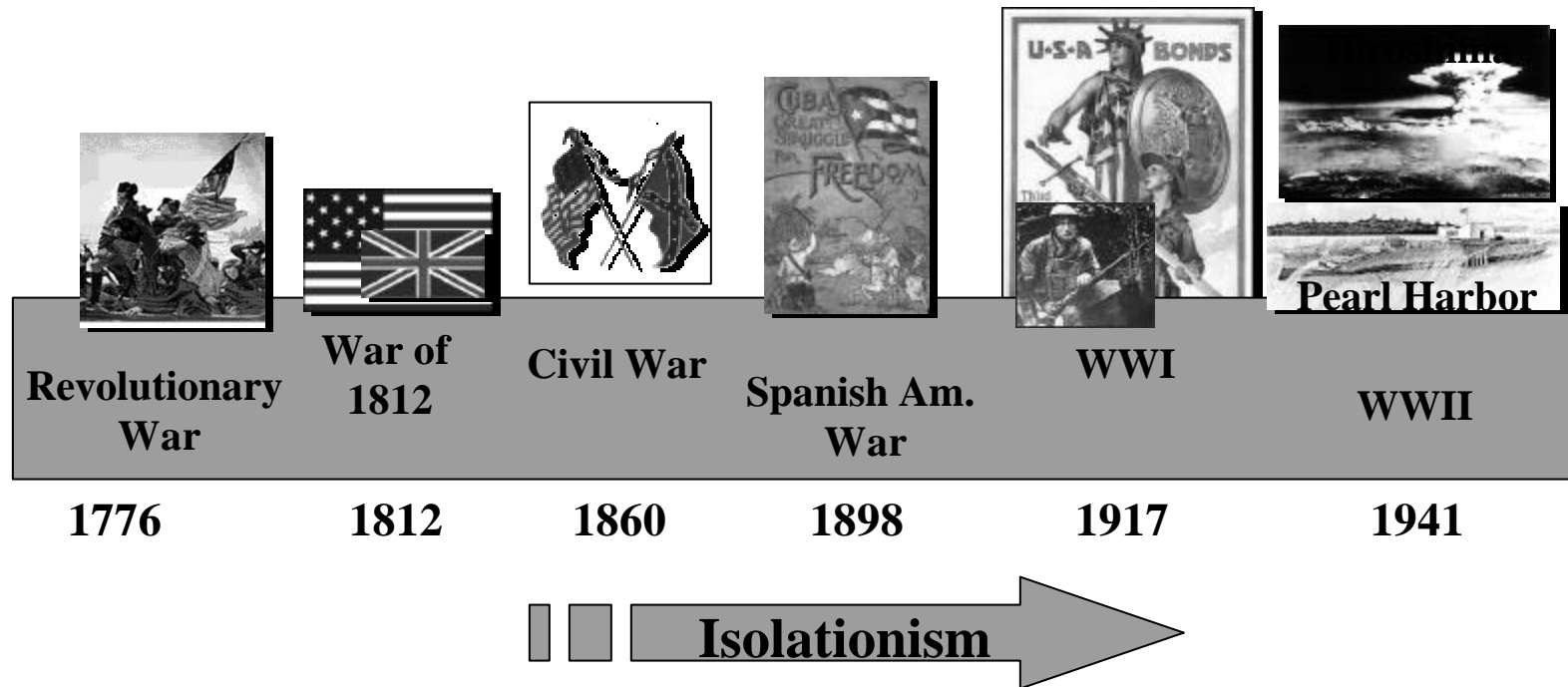
Discussion

- **Paradigm Lost**
- **DoD's New Role**
- **Challenge to America's Leadership
in a New Environment**

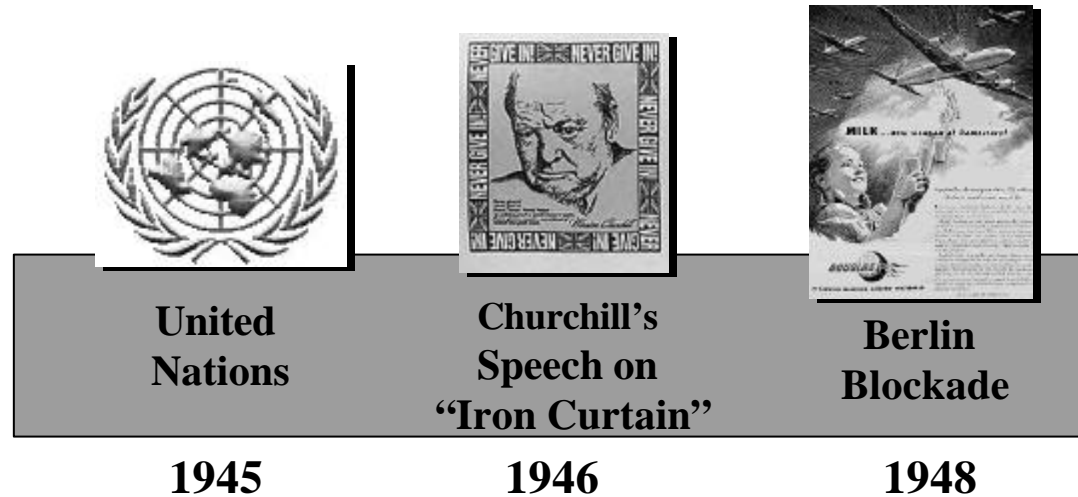
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Paradigm Lost



Paradigm Lost



"Cold War" Era 

Paradigm Lost



Korean War

1950-1953



**U-2 Pilot,
Francis Gary Powers
shot down**

1960



**Cuban Missile
Crisis**

1962



**Vietnam
Conflict**

1959-75



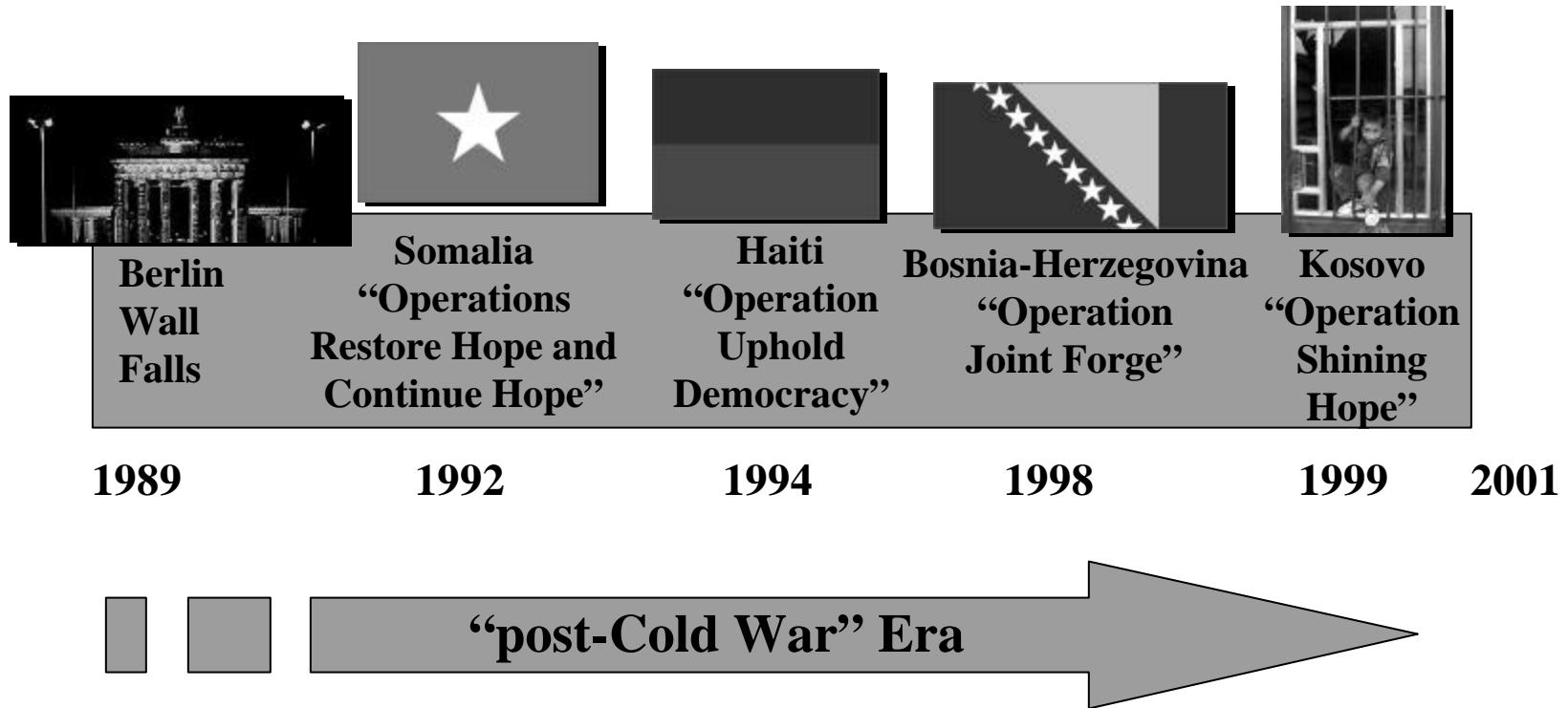
**Reagan's
"Evil Empire"
Speech**

mid-1980's



"Cold War" Era

Paradigm Lost



Paradigm Lost



The great debate...
What role, if any, does/should the U.S. military play today?

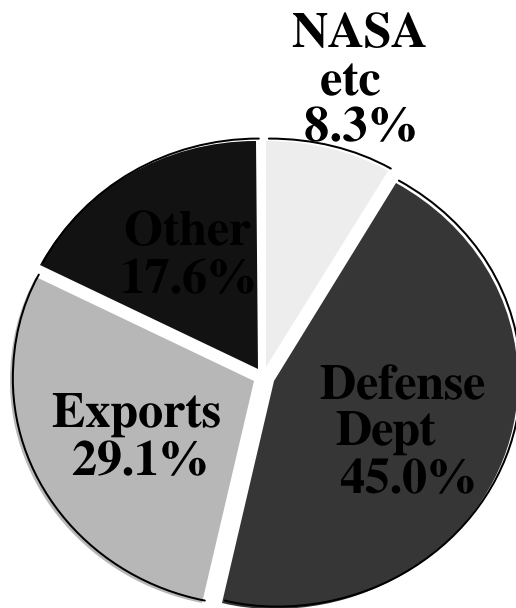
Ad Hoc Paradigm?

*We may be in for a long transition
to a new paradigm.*

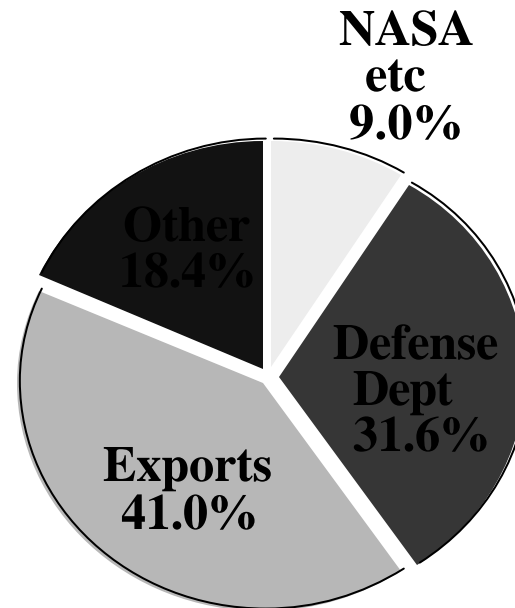
Discussion

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U.S. Aerospace Industry Sales

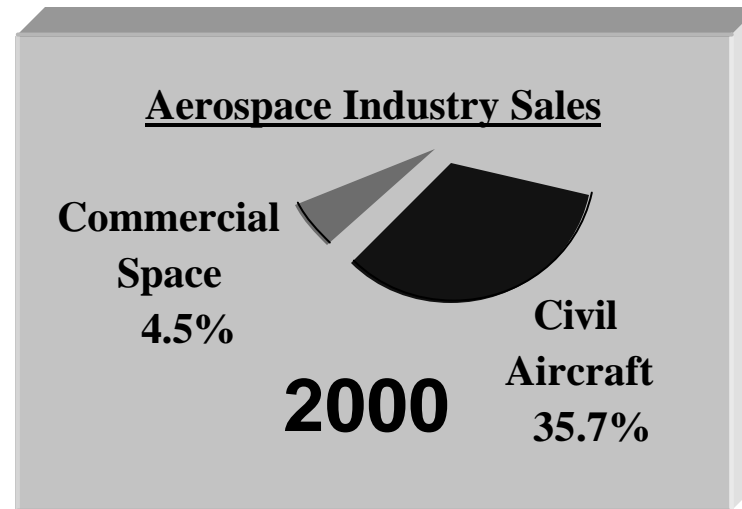


1990 (\$134B)

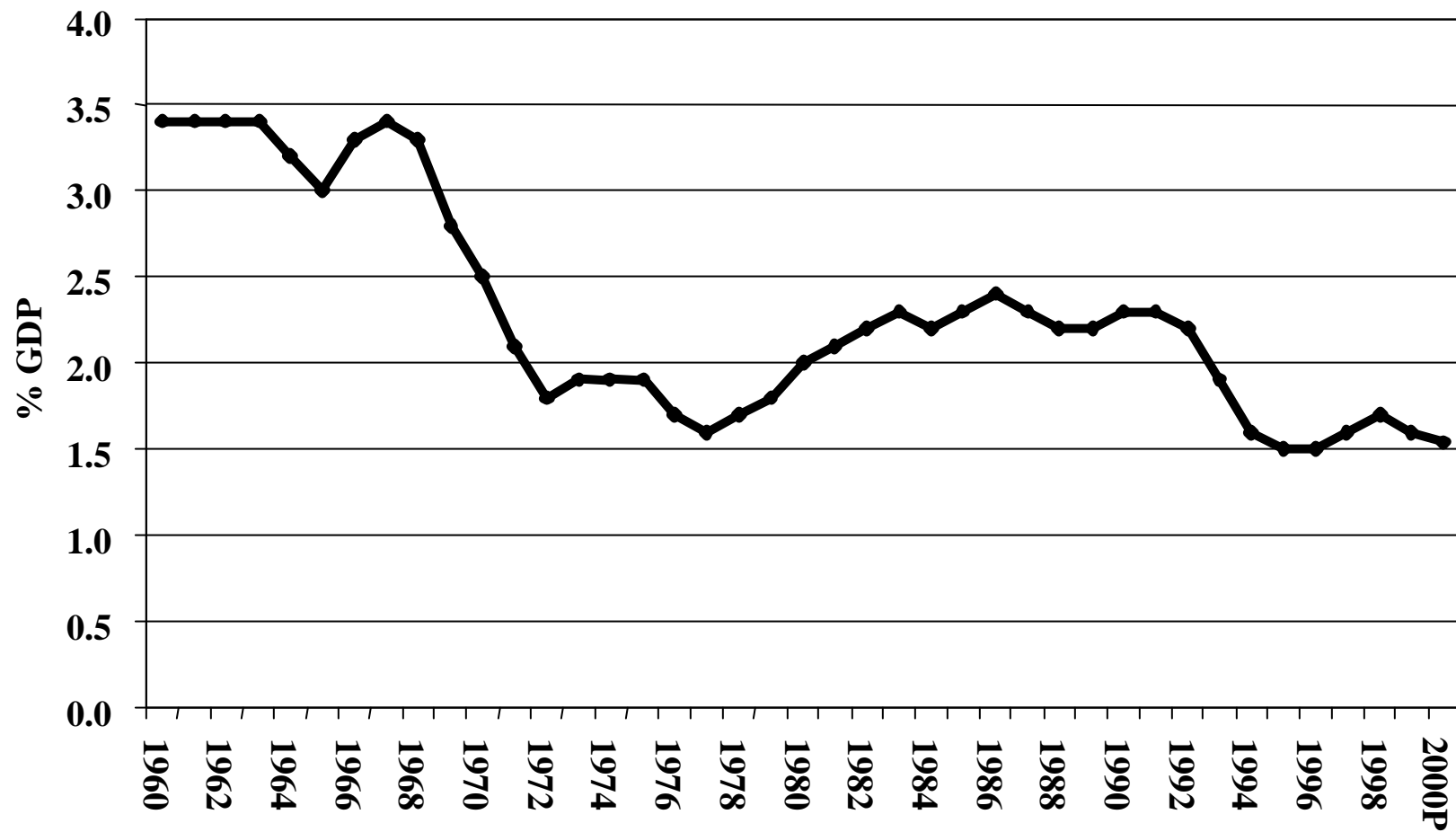


2000p (\$144B)

Change In Business Base

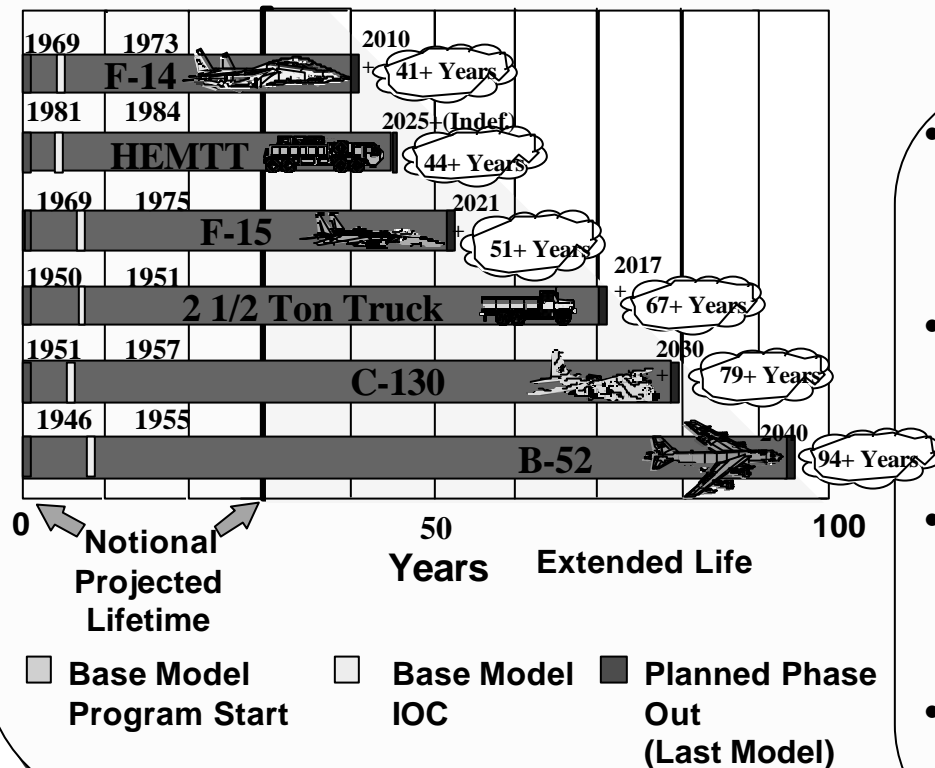
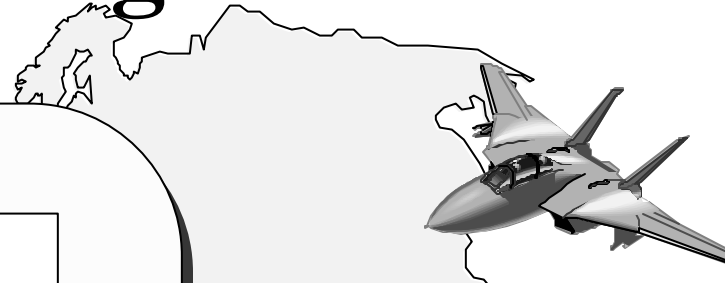


Aerospace Industry Sales as Percentage of GDP





A Looming Crisis?

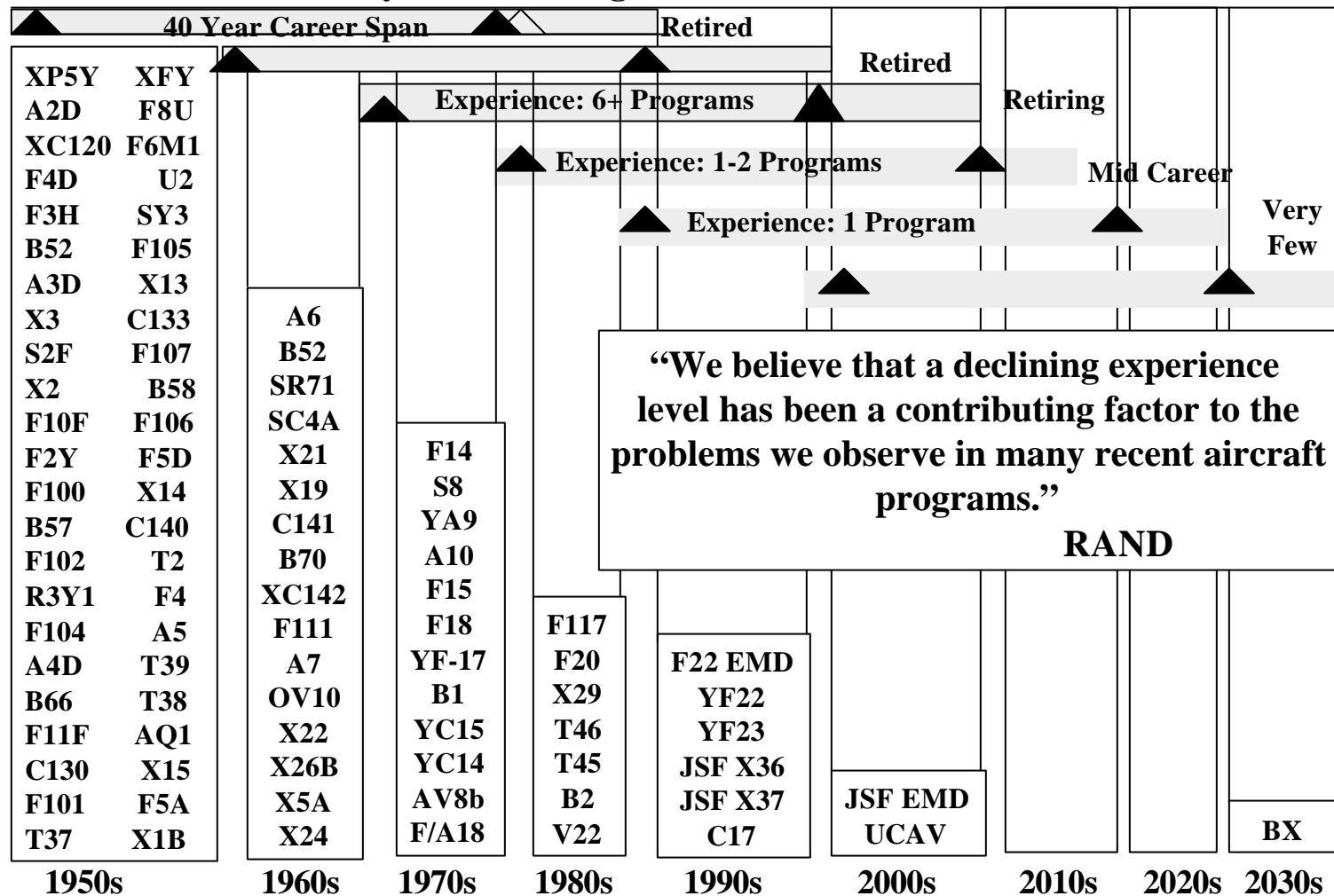


- Deferred modernization leading to an aging fleet in fixed budget environment.
- We are on our 3rd or 4th generation of equipment operators.
- Operation and maintenance of this aging fleet consumes over \$80 Billion per year.
- We're choking off resources for modernization.

Declining Experience Levels

Military Aircraft Programs

Vertical Bars: Military Aircraft Program Starts



Ref: RAND Study (chart by Northrop Grumman)

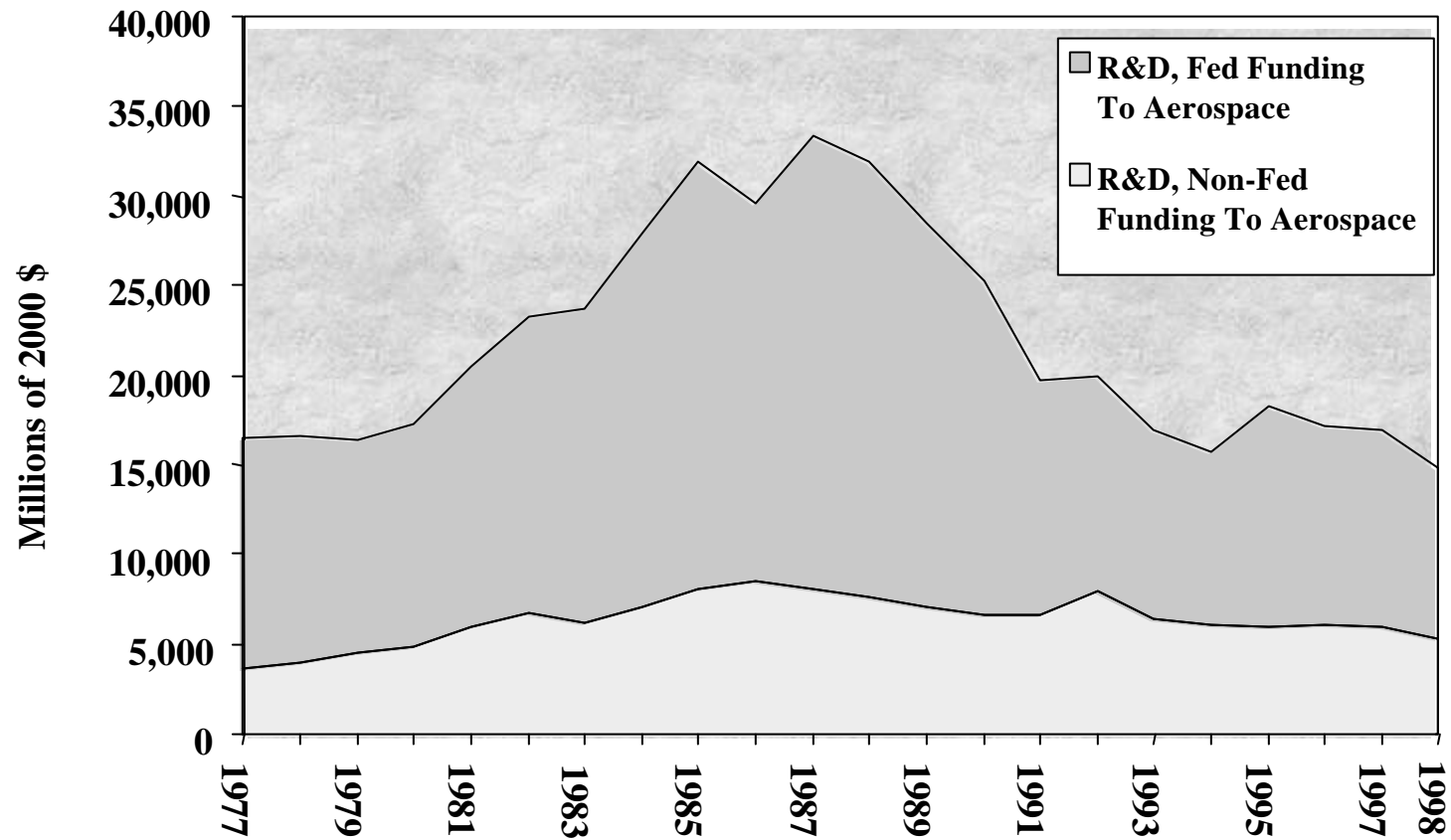
Implications

- **We look at export licensing differently**
- **DoD must learn how to rapidly adopt commercial technology**
- **DoD must learn how to inject new technology into old systems**

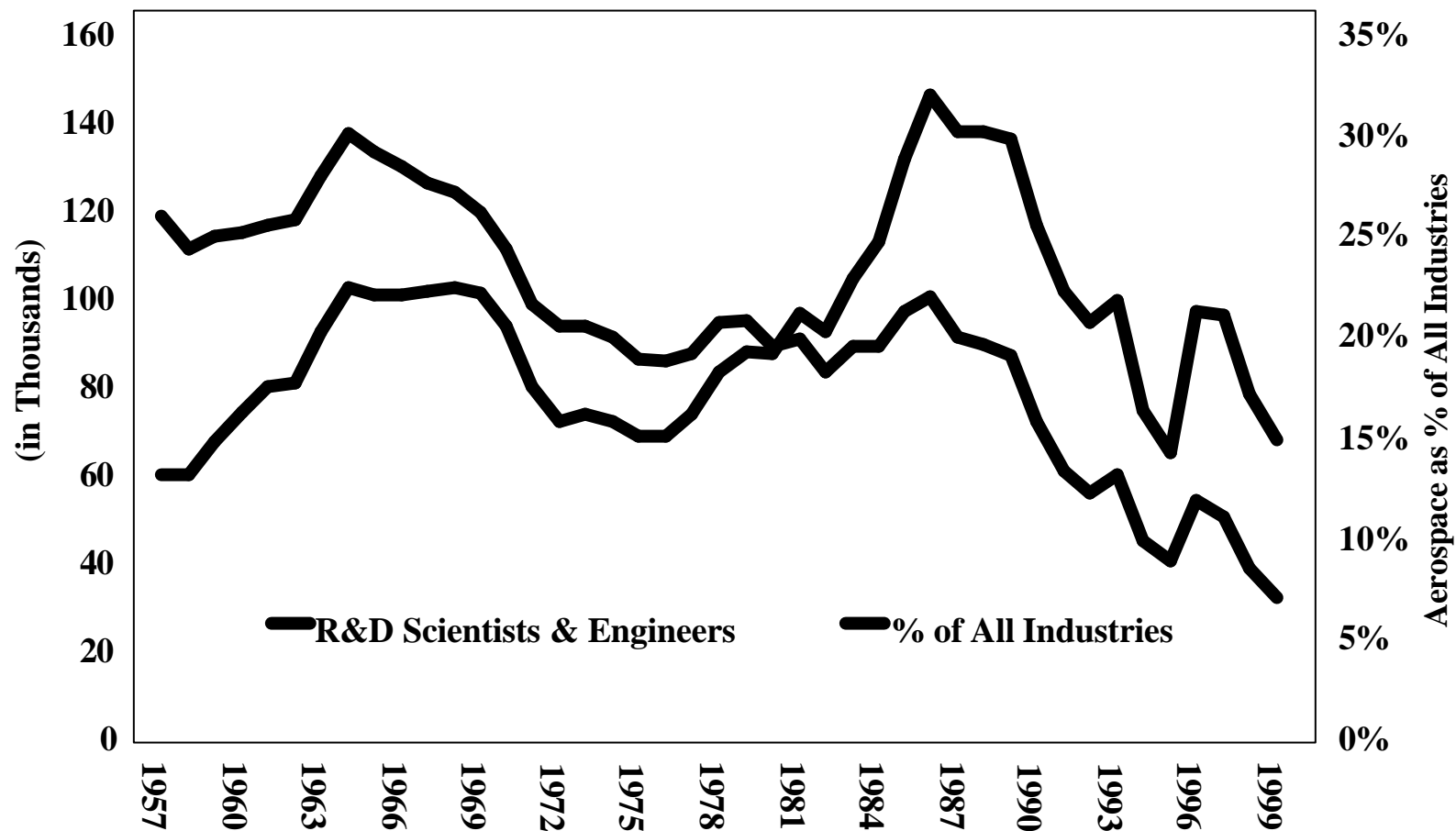
Discussion

- **Paradigm Lost**
- **DoD's New Role**
- **Challenges to America's Leadership
in a New Environment**

Aerospace R&D Funding

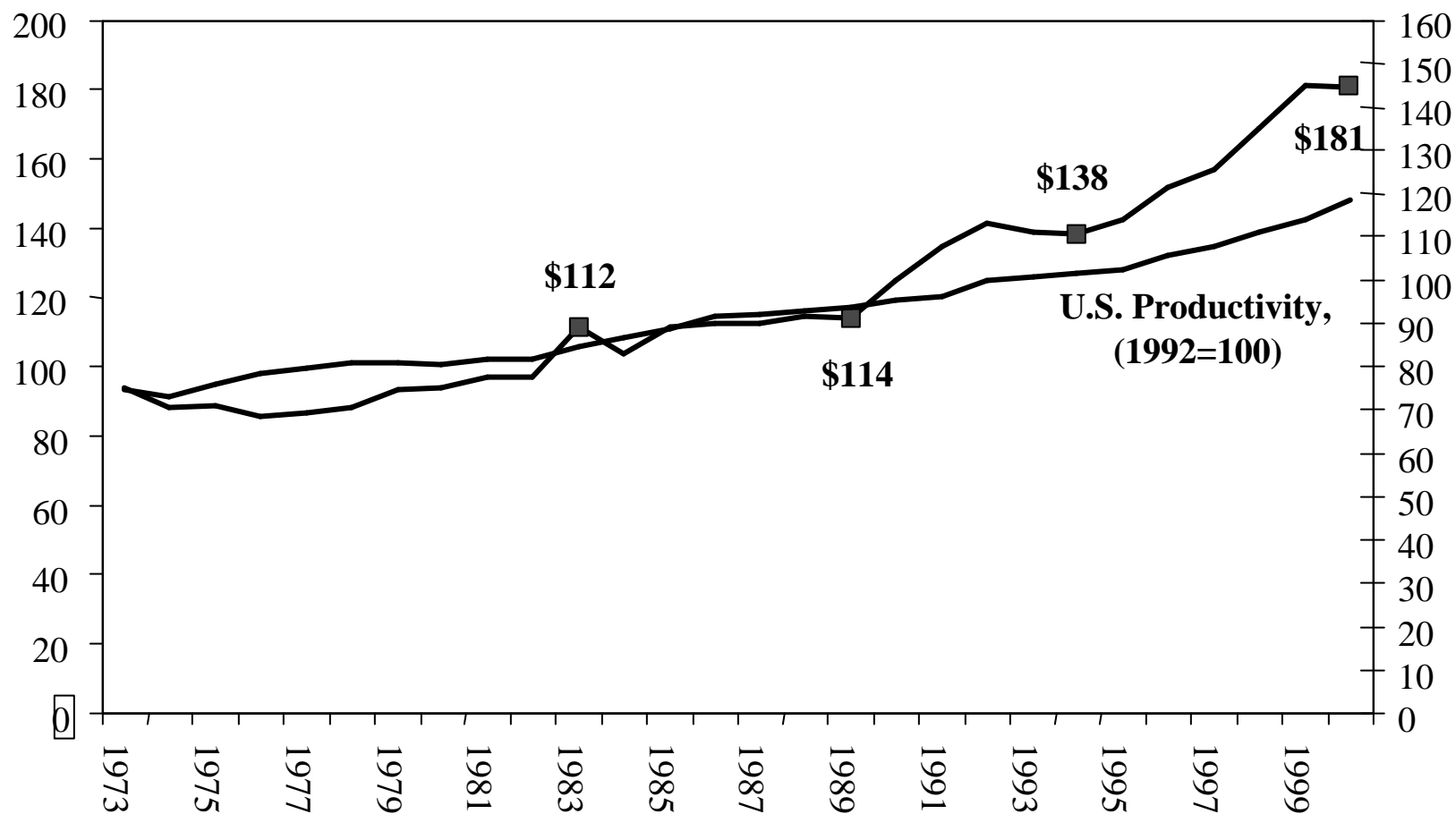


R&D Scientists & Engineers Employment in Aerospace and as Percentage of All Industries



U.S. Aerospace Industry Sales per Employee

(in billions of constant dollars)



Challenges - Military/Industry

- **US military casualty aversion**
- **US civilian casualty aversion**
- **Concern about infrastructure**
- **Low tolerance for long conflict**
- **Need for rapid reaction**
- **Need for allied participation**

Challenges - Commercial

- **Increasing demand for passenger and freight capacity**
- **Severe hub saturation**
- **Demand for greater safety**
- **Increasing concern for ecology issues (noise/pollution)**
- **US/European trade issues**

Today's Trends in Aerospace Industry

- ♦ **Increasing civil/military integration**
- ♦ **Consolidation of companies at multiple levels driven by market, world economic situation, need to compete with American giants**
- ♦ **Emergence of competing sectors for capital**
- ♦ **Strong erosion of government-sponsored research**
- ♦ **Misconception regarding the government's ability to implement reform**
- ♦ **Primes become systems designers, integrators, final assemblers and after-market supporters**

Tomorrow's Revolution in Aerospace

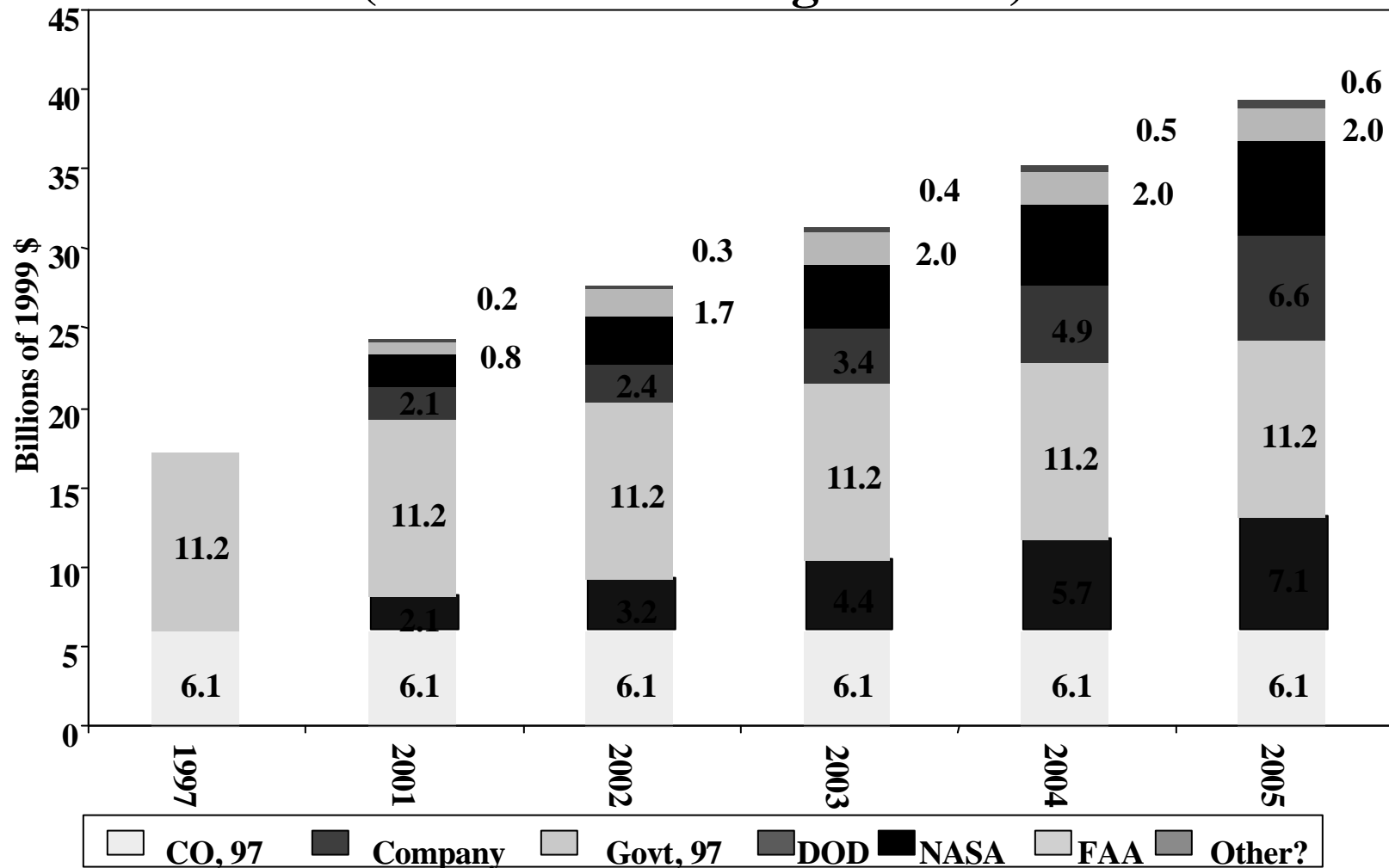
- **New ATC systems**
- **New sensors/communications links w/"big pipes"**
- **New power sources**
- **Horizontal takeoff/landing space ships & launch vehicles**
- **Greater use of automation in the cockpit**
- **Broadened use of RPVs/UAVs by military**

What Does It All Mean?

- **Need to produce airplanes already designed**
- **Need to start the program for the second half of the 21st Century**
- **Xo atmospheric**
- **New propulsion systems**
- **Robotics**
- **Need more R&D**

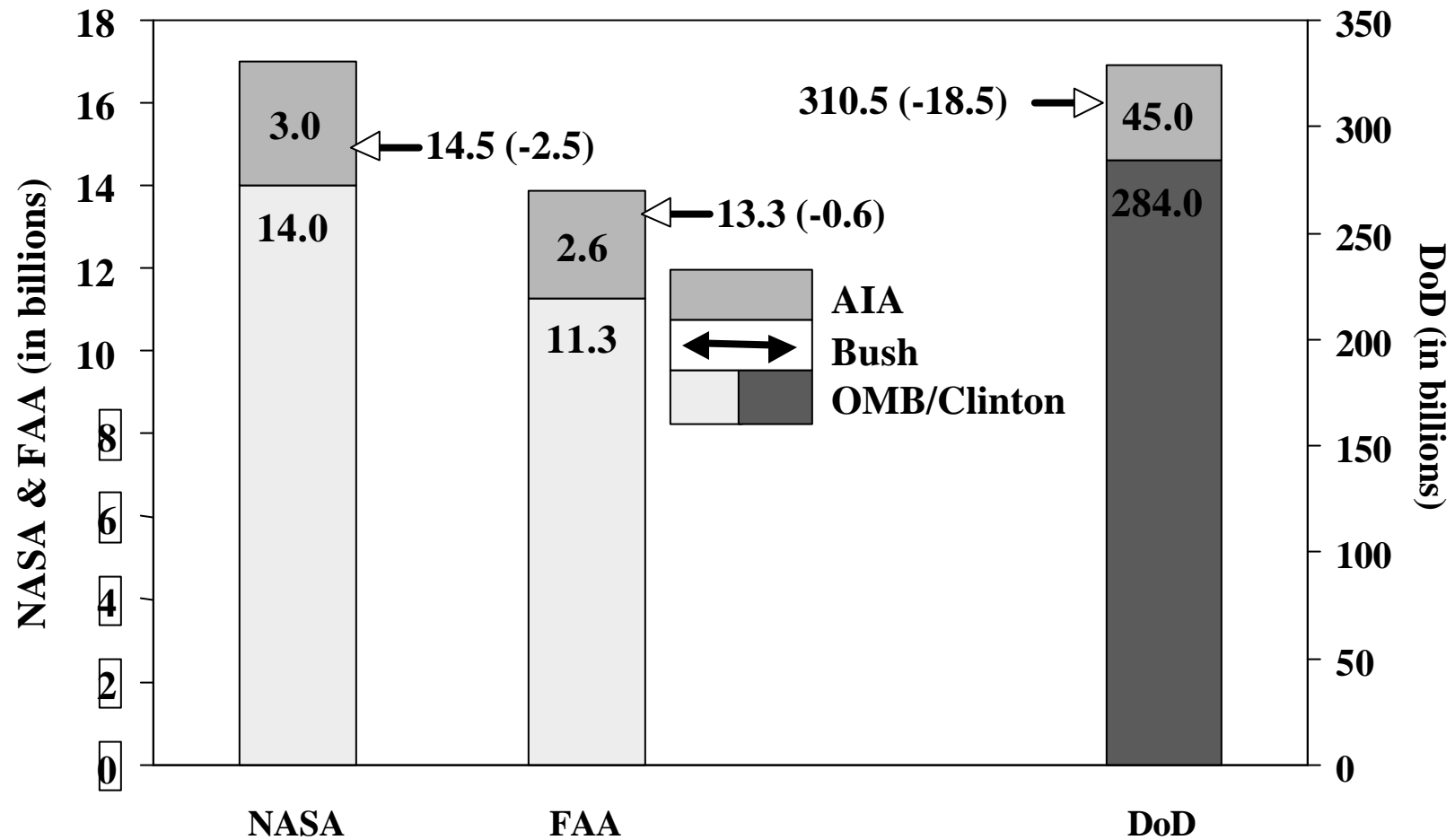
Aerospace R&D Funding

(Base Year vs Target Level)

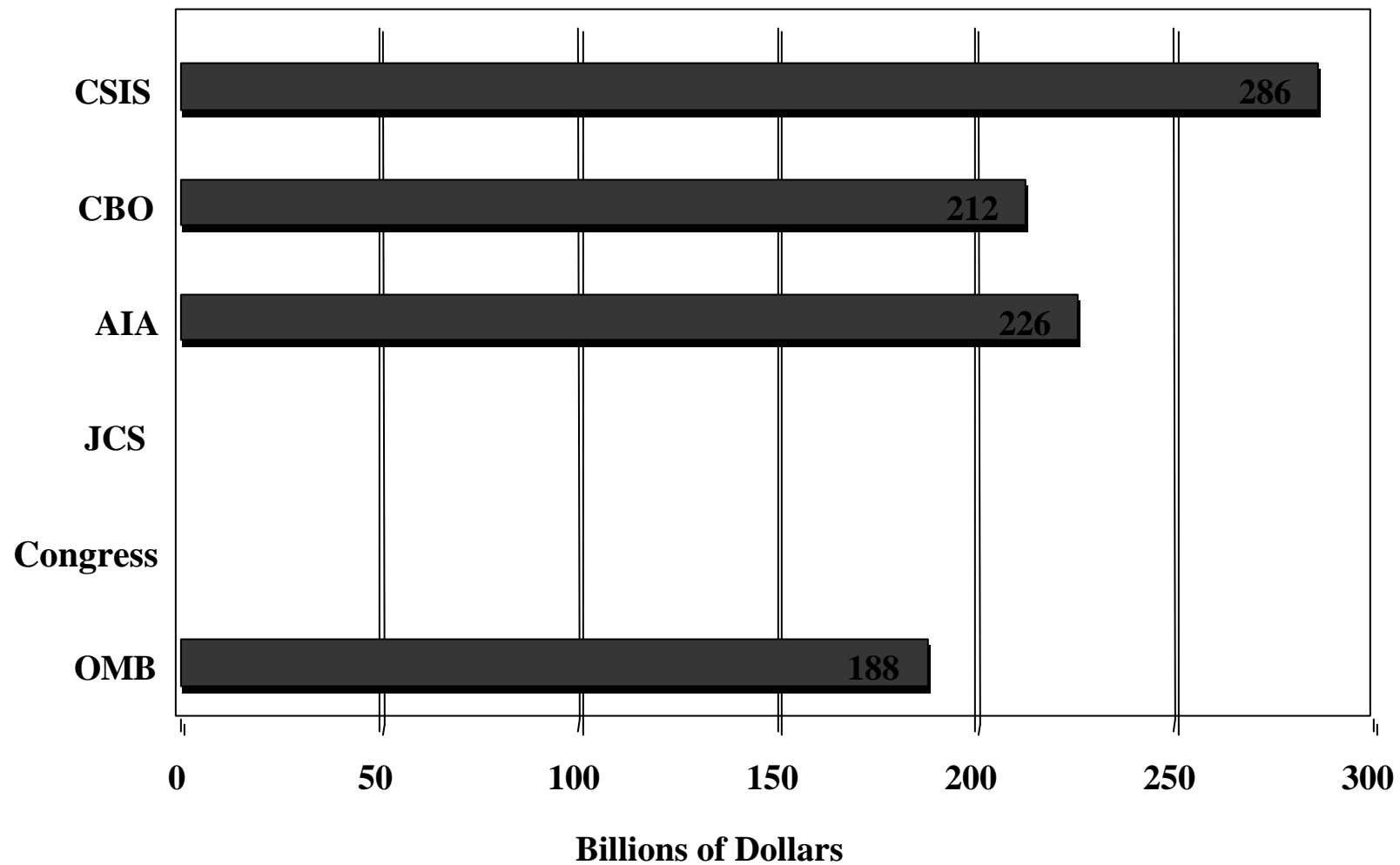


Recommended Increases in FY 2002

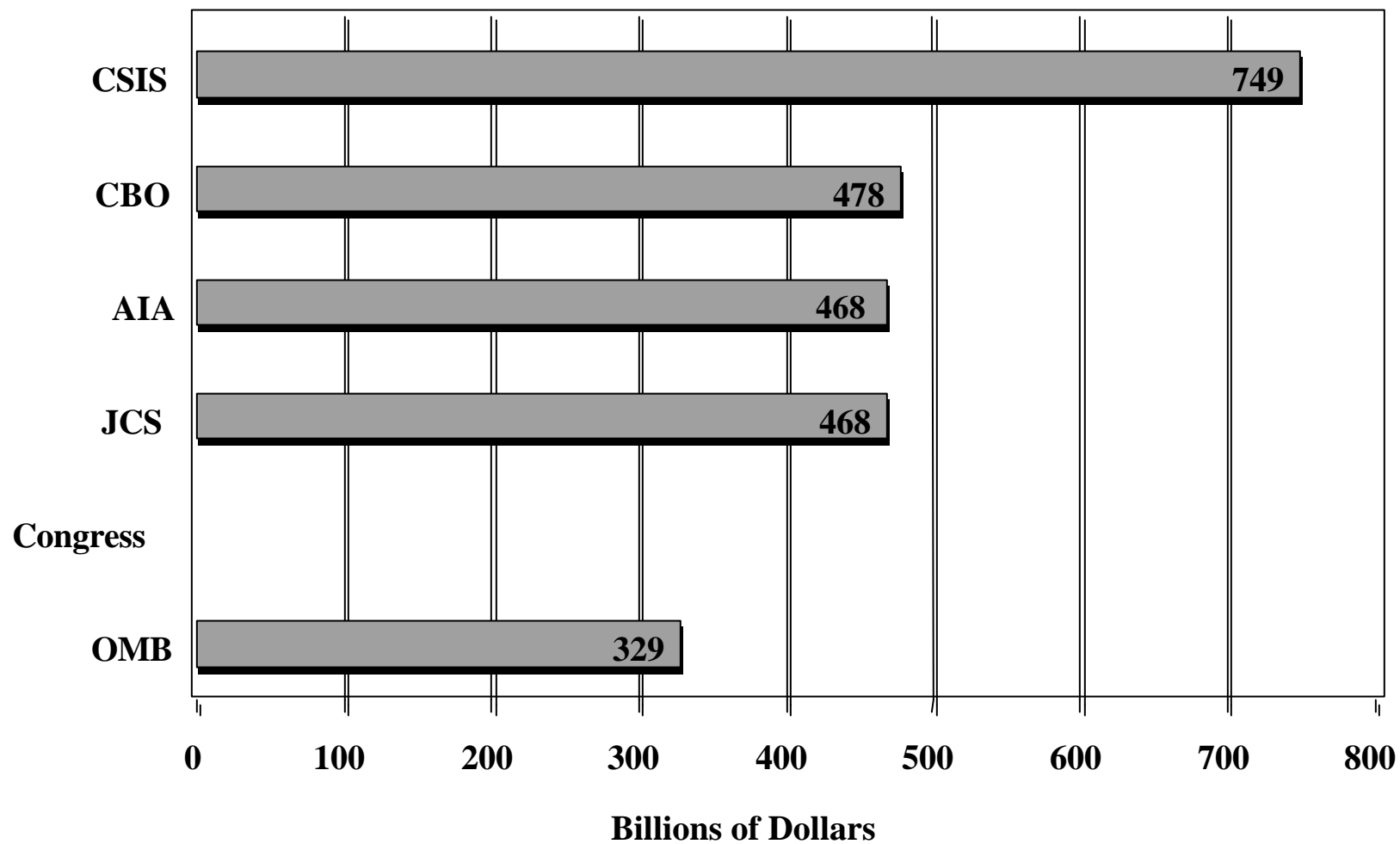
AIA vs. Proposed



DoD RDT&E (FY01-FY05)



DoD Procurement (FY01-FY05)



Presidential Commission on the Future of the Aerospace Industry

Public Law 106-398, SEC. 1092



President appoints 6 Members

House appoints 3 Members

**2 by Majority Leader
1 by Minority Leader**

Senate appoints 3 Members

**2 by Majority Leader
1 by Minority Leader**

*** Signed into law Oct.30; Start date: March 1, '01; Duration: One year**

Presidential Commission

Appointees

Robert J. Stevens
President & COO
Lockheed Martin Corporation

William Schneider, Jr.
President, International Planning Services, Inc.
Former Under Secretary of State for Security Assistance,
Science and Technology

The Honorable John J. Hamre
President & CEO,
Center for Strategic & International Studies
Former Deputy Secretary Defense

R. Thomas Buffenbarger (*not confirmed*)
President, International Association
of Machinists & Aerospace Workers

Presidential Commission on the Future of the Aerospace Industry

Duties

- **Study issues relevant to future of U.S. aerospace industry (economic & national security)**
- **Evaluate effect of laws, regulations, policies, & procedures of the Federal Government on the U.S. aerospace industry**
- **Study adequacy of projected budgets of Federal agencies for aerospace R&D, procurement, national space launch infrastructure, aerospace science and engineering**
- **Consider and recommend feasible actions by Federal Government to support robustness of U.S. aerospace industry**

Presidential Commission

AIA Issues

Budget Process

Acquisition Processes

Financing and Payment of Government Contracts

Trade and Export Statutes and Regulations

U.S. Tax Laws and Practices

National Space Launch Infrastructure

Science and Engineering Education

Civil Aviation

